

ABSTRACT OF THE DISCLOSURE

A METHOD AND SYSTEM FOR GENOTYPING

The present invention pertains to a method for genotyping. The method comprises the steps of obtaining nucleic acid material from a genome. Then there is the step of amplifying a location of the material. Next there is the step of assaying the amplified material based on size and concentration. Then there is the step of converting the assayed amplified material into a first set of electrical signals corresponding to size and concentration of the amplified material at the location. Then there is the step of operating on the first set of electrical signals produced from the amplified material with a second set of electrical signals corresponding to a response pattern of the location to produce a third set of clean electrical signals corresponding to the size and multiplicities of the unamplified material on the genome at the location. The present invention also pertains to a system for genotyping. The system comprises a mechanism for obtaining nucleic acid material from a genome. The system also comprises a mechanism for amplifying a location of the material. The amplified mechanism is in communication with the nucleic acid material. Additionally, the system comprises a mechanism for assaying the amplified material based on the size and concentration. The assaying mechanism is in communication with the amplifying mechanism. The system moreover comprises a mechanism for converting the assayed amplified material into a first set of electrical signals corresponding to size and concentration of the amplified material at the location. The converting mechanism is in communication with the assaying mechanism. The system for genotyping comprises a mechanism for operating on the first set of electrical signals produced from the amplified material with a second set of electrical signals corresponding to a response pattern of the

location to produce a third set of clean electrical signals corresponding to the size and multiplicities of the unamplified material on the genome at the location. The operating mechanism is in communication with the sets of electrical signals. The present invention also pertains to a method of analyzing genetic material of an organism. The present invention additionally pertains to a method for producing a gene.